

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A silicon/silicon carbide composite comprised of 45 to 75 weight % of silicon and 25 to 55 weight % of silicon carbide, said silicon carbide ~~being formed from~~ consisting essentially of an assembly of fibers each having a thickness of 150 μm or less and a length of 0.8 to 3.5 mm, said composite having a surface on which a silicon carbide film having a thickness of 30 to 500 μm is formed.
2. (Currently Amended) A silicon/silicon carbide composite according to claim 1, wherein said silicon/silicon carbide composite contains carbon left without reaction therein in an amount of 0.25 % by weight or less ~~includes a silicon carbide film having a thickness of 30 to 500 μm formed on a surface thereof.~~
- B2 3. (Currently Amended) A silicon/silicon carbide composite according to claim 1, wherein said silicon/silicon carbide composite ~~includes a dummy wafer with a~~ contains the silicon carbide film having a thickness of 30 to 150 μm ~~formed on the surface thereof, said to form~~ a dummy wafer having a total thickness of 0.5 mm to 1 mm.
4. (Currently Amended) A silicon/silicon carbide composite according to claim 1, wherein said silicon/silicon carbide composite ~~includes~~ is a semiconductor heat treatment member.
5. (Currently Amended) A silicon/silicon carbide composite ~~according to claim 3~~ consisting essentially of 45 to 75 % by weight of silicon and 25 to 55 % by weight of silicon carbide, said silicon carbide consisting essentially of an assembly of fibers each having a thickness of 150 μm or less and a length of 0.8 to 3.5 mm, said composite having a surface on which a silicon carbide film having a thickness of 30 to 500 μm is formed ~~wherein said silicon/silicon carbide composite includes a semiconductor heat treatment member.~~
- a/p 6. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite comprising a first step in which cellulose fibers each having a fiber thickness of 150 μm or less are heated

at a temperature of 500°C to 1500°C in a non-oxidizing atmosphere to obtain a porous carbon body having a bulk density of 0.10 to 0.80 g/cm³;

and a second step in which said porous carbon body is silicified in an atmosphere containing silicon.

¹⁰
1. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ⁹8, wherein said thickness of each cellulose fiber is within a range of 5 to 80 μm.

¹¹
8. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ⁹8 or ¹⁰1, wherein the length of each cellulose fiber is 1.5 mm or more.

B2 ¹²
9. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ⁹8, wherein said cellulose fiber is paper pulp.

¹³
10. (Withdrawn) A process of manufacturing a silicon/silicon carbide composite according to claim ¹¹8, wherein said cellulose fiber is paper pulp.

¹⁴
11. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ⁹8, wherein the bulk density of the porous carbon body produced by said first step is 0.70 g/cm³ or less.

¹⁵
12. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ⁹8, in which a silicification treatment in said second step is conducted by either a reaction with fused silicon or a reaction with silicon monoxide gas.

¹⁶
13. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ¹¹8, wherein a silicification treatment in said second step is conducted by either a reaction with fused silicon or a reaction with silicon monoxide gas.

¹⁷
14. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ¹⁴11, wherein a silicification treatment in said second step is conducted by either a reaction with fused silicon or a reaction with silicon monoxide gas.

¹⁸
~~15~~. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ~~6~~⁹, wherein the porous carbon body produced by said first step is heated at a temperature of 1100°C to 2000°C in an atmosphere of halogen gas to be purified prior to the second step.

¹⁹
~~16~~. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ~~8~~¹¹, wherein the porous carbon body produced by said first step is heated at a temperature of 1100°C to 2000°C in an atmosphere of halogen gas to be purified prior to the second step.

²⁰
~~17~~. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ~~12~~¹⁵, wherein the porous carbon body produced by said first step is heated at a temperature of 1100°C to 2000°C in an atmosphere of halogen gas to be purified prior to the second step.

⁶
~~18~~. (Currently Amended) A silicon/silicon carbide composite according to claim ~~2~~⁵, wherein said silicon/silicon carbide composite ~~includes~~ is a dummy wafer with a the silicon carbide film having a thickness of 30 to 150 μm formed on the surface thereof, said dummy wafer having a total thickness of 0.5 to 1 mm.

⁷
~~19~~. (Currently Amended) A silicon/silicon carbide composite according to claim ~~2-5~~, wherein said silicon/silicon carbide composite ~~includes~~ is a semiconductor heat treatment member.

²¹
~~20~~. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ~~7~~¹⁰, wherein the length of each cellulose fiber is 1.5 mm or more.

²²
~~21~~. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ~~7~~¹⁰, wherein said cellulose fiber is paper pulp.

²³
~~22~~. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ~~7~~¹⁰, wherein the bulk density of the porous carbon body produced by said first step is 0.70 g/cm³ or less.

~~23~~²⁴. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ~~10~~⁹, wherein the bulk density of the porous carbon body produced by said first step is 0.70 g/cm³ or less.

~~24~~²⁵. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ~~7~~¹⁰, in which a silicification treatment in said second step is conducted by either a reaction with fused silicon or a reaction with silicon monoxide gas.

~~25~~²⁶. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ~~10~~¹³, in which a silicification treatment in said second step is conducted by either a reaction with fused silicon or a reaction with silicon monoxide gas.

~~26~~²⁷. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ~~7~~¹⁰, wherein the porous carbon body produced by said first step is heated at a temperature of 1100°C to 2000°C in an atmosphere of halogen gas to be purified prior to the second step.

~~27~~²⁸. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ~~10~~¹³, wherein the porous carbon body produced by said first step is heated at a temperature of 1100°C to 2000°C in an atmosphere of halogen gas to be purified prior to the second step.

~~28~~²⁹. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ~~13~~¹⁶, wherein the porous carbon body produced by said first step is heated at a temperature of 1100°C to 2000°C in an atmosphere of halogen gas to be purified prior to the second step.

~~29~~³⁰. (Withdrawn) A process for manufacturing a silicon/silicon carbide composite according to claim ~~14~~¹⁷, wherein the porous carbon body produced by said first step is heated at a temperature of 1100°C to 2000°C in an atmosphere of halogen gas to be purified prior to the second step.

B2 80. (New) A silicon/silicon carbide composite according to claim 5, wherein said silicon/silicon carbide composite contains carbon left without reaction therein in an amount of 0.25 % by weight or less.
